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THE EFFECT OF BROADENED RANGES OF EXPECTANCY ON SATISFACTION WITH PERFORMANCE

A Thesis in

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by

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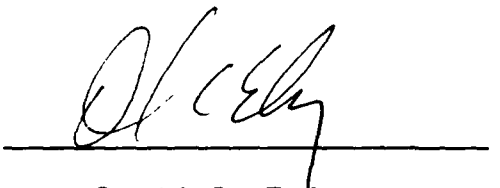

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ABSTRACT

The present research investigates the effect that the breadth of expectancies have on satisfaction with performance. Although some scholars have suggested that expectancy should be conceptualized in terms of several plausible estimates of success, past research has operationalized expectancy as a person's single estimate of his or her probability of success. In contrast in the present study expectancies are conceptualized as involving a range of plausible expected outcomes.

An experiment was conducted to assess the effect that the breadth of the expectancy range had on satisfaction with performance. It was hypothesized that individuals with a broad range of expectancy would report greater satisfaction with performance than would those with a narrow range of expectancies. To test this hypothesis, 132 subjects responded to expectation and satisfaction measures while performing a bogus trait assessment task. Expectancy ranges and performance outcomes were manipulated by presenting subjects with false feedback scores.

Results indicated that the breadth of the expectancy range influenced satisfaction with performance. As predicted, subjects with broad ranges of expectancies

cont.

reported greater satisfaction with performance than did those with narrow expectancy ranges.

The current study also examined the effect that the breadth of the expectancy range had on the subjects' attributional and dissonance reduction strategies. It was expected that these processes might mediate the hypothesized satisfaction effect. Analyses of subject responses to several attribution and dissonance items presented on a post-task questionnaire did not support this contention.

Alternative explanations of the satisfaction effect are presented. In particular, it is suggested that broad expectancy ranges may make subjects more optimistic, resulting in greater satisfaction. Implications of the results are discussed in terms of how future researchers may add to our understanding of expectancy-satisfaction relationships by examining other potentially important features of the expectancy range.

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Chapter 1

INTRODUCTION

Over the years an abundance of psychological research has been devoted to studying the effect that expectations have on performance and satisfaction. In a thorough review of the expectancy literature, Lisenmier and Brickman (1980) focused on evidence concerning the expectations that people have for positive and negative events that are contingent on their own behavior. These researchers provided a detailed discussion of findings concerning two general questions: How people's expectations for events affect their behavior prior to the occurrence of events, and how the same expectations affect their reactions to these events after they have occurred. Lisenmier and Brickman (1980) drew two conclusions from their review of the expectancy literature: 1) High expectations, or expectations for positive outcomes, facilitate performance, and 2) Low expectations, or expectations for negative outcomes, facilitate satisfaction.

The achievement motivation literature documents that high expectations lead to subsequent success (Vroom, 1964; Atkinson & Raynor, 1974; Bandura, 1977). However, as a

person's high expectations are followed by consistent levels of high performance, the individual becomes increasingly less satisfied with his performance (Janoff-Bulman & Brickman, 1980). A different performance-affect relationship is seen with persons who have low expectations. Even though individuals in the low expectancy group are the less productive of the two groups, they receive greater satisfaction from subsequent improvements in performance (Ilgen & Hamstra, 1972) and greater recognition for improvement (Simpson & Ostrom, 1976) than does the high expectancy group. However, there is evidence that indicates that satisfaction with an improved score may be limited for this consistently low performing group. Although these individuals can account for the success as a stroke of luck, they are concerned that others may read too much into their improved performance. Their reason for concern centers on a fear that greater effort and continued improvement in performance will be expected of them in the future (Brickman, Lisenmier, & McCariens, 1976; Maracek & Mettee, 1972). Nevertheless, under some range of circumstances, people with low expectations are more satisfied -- at least initially -- with a given outcome then are people with high expectations.

Lisenmier and Brickman (1980) concluded their review by calling for researchers to study how people balance the desirable features of high expectations against the desirable features of low expectations. The present study investigates one generally neglected factor through which people might balance the features of high and low expectations: the range of expectancies that people hold.

Although past research (Aronson & Carlsmith, 1962; Ilgen, 1971; Ilgen & Hamstra, 1972; Ostrove, 1978) has addressed how expectancies affect subsequent satisfaction with performance, it has been based on the assumption that people had a single expectancy. That is, expectancy is conceptualized as a single value (e.g. I expect to get a 75 on a test), rather than as a range of expectancies (e.g. I'll probably get a 75, but I might get as high as a 90, or I might get as low as a 60). In the present study, expectancies are conceptualized as involving a range. Instead of asking for a single estimate of success, subjects were asked to report a low, high, and most likely scores they expected on an experimental task. The difference between the low and high expected scores represents the individual's expectancy range.

There is evidence (Wollert, 1979) which suggests that people sometimes have narrow expectancy ranges (i.e. little variability between high and low expectancies) and

at other times have broader expectancy ranges (i.e. high variability between high and low expectancies). Further, there are a number of ideas (presented in Chapter 2) which suggest that the breadth of an individual's expectancy range affects not only the likelihood of expectancy shifts (Wollert, 1979), but also a number of other outcomes as well. The present study is designed to test the following hypothesis: that broadening of the expectancy range affects satisfaction with performance, such that persons with broadened ranges of expectancies experience greater satisfaction with performance than do persons with narrow expectancy ranges. Confirmation of this hypothesis would indicate that the study of expectancy effects should not be focused or restricted to conceptualizations or measurements of expectancy as a single estimate.

In addition to examining satisfaction with performance, the present study also explored the effect that broadened ranges of expectancy have on attributional and dissonance reduction strategies that might mediate the hypothesized satisfaction effect.

Chapter 2

LITERATURE REVIEW

The review of the literature will examine two issues that are central to the present study. First, a selective review is presented of past research that has measured expectancies as point estimates of individuals' subjective probability of success on a task. The shortcomings and limitations of the single estimate approach are addressed. Reasons are presented for examining the effect that expectancy ranges have on satisfaction with performance. The second issue involves a review of research literature that suggests that the breadth of the expectancy range influences satisfaction with task performance.

Critique of Research Operationalizing Expectancy as a Single Estimate

Much of the research examining how expectancies affect subsequent satisfaction with performance has been based on single-value measurements of expectancies. In earlier studies (Yaryan & Festinger, 1961; Locke, 1967), as well as more recent studies (Ilgen, 1971; Ilgen & Hamstra,

1972; Ostrove, 1978), researchers have measured expectancies as the single score that a subject expected to receive on upcoming trials. In other studies researchers have had subjects indicate a single probability of success using five-point (Dachler & Mobley, 1973) or seven-point scales (Lawler & Suttle, 1973). Researchers have often examined how satisfaction with performance depends on the degree of match between the person's single estimate of expectancy for success and the person's particular outcome.

Expectancies in the Aronson and Carlsmith study (1962) and the Ilgen study (1971) were manipulated by providing subjects with a series of low or high false feedback scores of minimal variance. Satisfaction with performance was measured following receipt of infrequent (Ilgen, 1971) or final scores (Aronson & Carlsmith, 1962) which either confirmed or disconfirmed the expectancy.

Weaver and Brickman (1974) criticized such techniques. They claimed that designs which minimize the occurrence of disconfirming trials kept subjects from revising their expectancies in accordance with the disconfirming scores. Since the subjects' expectancies were established with false feedback scores of minimal variance, it was unlikely that their expectancies would shift. Stated somewhat differently, the subjects'

expectancies had been manipulated where they could only compare subsequent performance with a narrow range of plausible outcomes.

Feather (1982) noted that expectancies can vary along a number of dimensions. He further stated that most past expectancy research has been concerned with what Bandura (1977) called a magnitude dimension. In other words, the expectancy was portrayed as a single estimate of the individual's subjective probability that a response will lead to a defined outcome.

Feather (1982) recognized another dimension, referred to as outcome generality. Outcome generality is concerned with the number of possible outcomes contained in an individual's expectancy. That is, some expectancies may relate to a wide range of possible outcomes; others to a narrow range or perhaps to one outcome. Feather also suggested that it is quite conceivable that persons could estimate the same single value response as their probability for success, but differ in strength of that estimate. Strength was defined as how quickly that single estimate might change (p.409).

Wollert (1979) has examined how the range of possible outcome estimates contained in an expectancy range relates to shifts in expectancies. His expectancy confidence hypothesis is based on the premise that people not only

hold beliefs about the probabilities of success and reinforcement, but also hold beliefs about the accuracy of their expectancies. Wollert posits that persons who hold a narrow range of plausible estimates of probable success possess high levels of expectancy confidence. Low expectancy confidence exists among persons who accept many expectancies as plausible estimates of their chances of success. He further asserts that the degree of change in expectancies is a function of expectancy confidence. The lower the expectancy confidence, the more likely that expectancies will change.

Underlying the present study is a contention that the effect of expectancies on satisfaction with performance can be better understood by examining expectancies in terms of ranges rather than single point estimates. It is likely that breadth of the expectancy range affects not only expectancy shifts (Wollert, 1979), but also the individual's satisfaction with performance and other outcomes as well. Ideas that support this contention are presented in the next section. In addition to indices of satisfaction with performance, the present study also examined the effect that broadened expectancy ranges have on attributional and dissonance reduction strategies that might mediate the hypothesized satisfaction effect.

Literature Supporting Hypothesis

The following sections review evidence that supports the present study's hypothesis. This hypothesis focuses on the effect that broadened ranges of expectancy have on satisfaction with performance. It is predicted that relative to persons whose expectancy ranges are narrowed by feedback scores of minimal variance, people whose expectancies are broadened with performance scores of high variability will be more satisfied with their overall performance.

Assimilation and Contrast Effects

One mechanism through which expectancy range might be related to satisfaction involves assimilation and contrast effects (Sherif & Hovland, 1953). When persons assimilate a current outcome they are comparing that outcome with a similar outcome previously received. Their evaluation of present performance is biased in the direction of previous evaluations. An assimilation effect occurs when a person receives scores that vary minimally from an expected score. Adaptation level theory (Helson, 1964; Brickman & Campbell, 1971) suggests that prolonged exposure to a level of performance causes the person performing the task

to interpret changes in performance in terms of the previously held expectancy level. A contrast effect involves evaluations of present performance that are biased in a direction opposite to previous evaluations. Perceptual contrast theorists (Lingle & Ostrom, 1979) suggest that when present behavior varies with the expected behavior, the contrast may increase both attention to and encoding of behaviors. More attention may be devoted to performance that varies from the expectancy, and that performance may be encoded as more satisfying than performance that is consistent with previous levels of performance. Although it is hard to predict when assimilation and contrast occur, McArthur (1981), Schuh (1978), and Webster (1982) suggest that assimilation effects occur when present behavior is highly similar to past behavior, whereas contrast effects occur if present behavior is sufficiently dissimilar to past behavior.

Satisfaction with performance may be increased by an individual selectively contrasting or assimilating current outcomes with plausible outcomes in his or her expectancy range. Persons with broad expectancy ranges can selectively compare present outcomes against plausible outcomes at either the low or high end of their expectancy range, producing beneficial, non-threatening contrasts.

In other words, the individual might compare a current high outcome with a lower plausible outcome within the expectancy range and see the current outcome as favorable (e.g. This is a good score. It was possible that I could have done worse). Upon receipt of a low outcome the individual may chose to make an assimilative comparison (e.g. I'm not too surprized; I was ready for this). On the other hand, the person might receive a low current outcome and contrast it against a plausible outcome at the high end of the expectancy range, without feeling that the low outcome is an indication of continued failure (e.g. I could have done better. There is room for obtainable improvement). Persons with narrow ranges of expectancies cannot make these hedonically preferable selective comparisons.

Giving Up Too Early and Persisting Too Long

Several studies (Perez, 1973: Schalon, 1968; Shrauger & Sorman, 1977) have provided evidence that low expectancy individuals give up too quickly. Various expectancy - performance studies offer somewhat different explanations (i.e. Seligman "learned helplessness", 1975; Aronson, 1968; and Yaryan & Festinger "dissonance theory", 1961; and Weiner, Freeze, Kukla, Reed, Rest, & Rosenbaum

"attribution theory", 1971). However, they all offer the same prediction, that is, people who expect to do poorly will persist less in their efforts, especially in the face of failure. An underlying theme suggests individuals with low expectancies for success are likely to attribute failure to lack of ability, rather than a lack of effort. Brockner (1979) and Dweck (1975) have shown that when subjects' attention is focused to the task at hand and they are led to attribute failure to a lack of effort, they persist in similar tasks when facing future failures.

Janoff-Bulman and Brickman (1982) extended this analysis to problems encountered by high expectancy individuals when they persist in trying to solve impossible problems. The most obvious cost of high expectations for success is that they will lead people to waste a good deal of time trying to solve insoluble tasks (Janoff-Bulman & Brickman, 1982, p.211). At the heart of the problem is the high expectancy individual's illusion of control (Langer, 1975). Individuals whose high expectancy has been maintained with consistent performance feedback of minimal variance are no longer in a position in which their self-esteem is selectively maintained by working on tasks of moderate difficulty (Feather, 1967), nor are they satisfied with their current level of performance; instead, they are overly determined to

achieve status (to which future satisfaction is attached) by doing the impossible (Janoff-Bulman & Brickman, 1980).

Individuals who experience consistent failure or success feedback of minimal variance lose a sense that their performance is due to their efforts. Minimal variance of performance feedback narrows the expectancy range and affords individuals in either the low or high expectancy group an opportunity to attribute their performance to ability or lack of ability. The person with a narrow range of low expectancies feels regardless of the amount of effort expended on a task that continued failure is imminent.

Pursuant to the learned helplessness (Seligman, 1975; Abramson, Seligman, & Teasdale, 1978) and persistence literature (Weiss & Sherman, 1973; Janoff-Bulman & Brickman, 1982), it is proposed that persons with broad expectancy ranges are more likely to perceive their effort as contributing to their performance than are persons with narrow expectancy ranges. Their satisfaction with performance is increased, in part, by a perception that their efforts contributed to their outcomes.

Likelihood Cognitions

Mark and Folger (1984) suggest high likelihood cognitions (in which an expected outcome is seen as better than current conditions) are more pleasurable to the extent they can become substitutes for poor current outcomes (p. 196). Low expectancy individuals with narrow expectancy ranges are probably not able to adopt high likelihood cognitions. Performance that consistently confirms a low expectancy leaves little room for thoughts that increased effort will lead to future success.

Mark and Folger (1984), explained, "To the extent prospects for improvement are salient, positive object-directed responses will be maintained, and positive self-directed responses should be enhanced (i.e. pride should come from the anticipated accomplishment of surmounting previous difficulties)" (p. 212). Individuals with broad expectancy ranges have the opportunity to adopt high likelihood cognitions and experience satisfaction from thinking that given increased effort, improved performance is obtainable.

The Current Research

The present study investigated differences between low and high expectancy groups that received low or high variance performance feedback. Of specific interest was the examination of the effect that broadened ranges of expectancies have on satisfaction with performance. The current research attempted to further develop our understanding of expectancy effects by incorporating two features absent in previous research.

First, expectancies in the present study were examined in terms of ranges instead of point estimates. Rather than having subjects express a single score that reflected their expectancy, they were asked to report their expectancy by reporting a low, high, and most likely score they expected to obtain on upcoming trials. In the current study, the expectancy range is depicted as the difference between the subject's lowest and highest expected outcome.

Second, the current design was not limited to presentation of a single or infrequent disconfirming scores which prevented changes in expectancies (Weaver and Brickman, 1974). Some of the subjects in the present study were assigned to treatment conditions where they received scores that were both higher and lower than their

initial expectancy scores. By introducing this variability of feedback manipulation, the current study was able to examine the impact that low or high final outcomes had on low or high expectancy groups who had established narrow or broad expectancy ranges.

The central focus of the present study was not on the effect that single marginal or discrepant outcomes had on one's satisfaction with performance. That effect has been thoroughly addressed in past research (i.e., Aronson & Carlsmith, 1962; Ilgen, 1971; Ilgen & Hamstra, 1972). Instead, the present study is a test for the cumulative effects that the receipt of low and high variability feedback have on satisfaction with performance.

Nevertheless, the present study also examined the effect of final outcome scores consistent or inconsistent with prior feedback. That is, after the false feedback was used to create initial expectancies (low or high) and the degree of variability around those (low or high) expectancies, subjects were also exposed to a series of final outcome scores that were either low or high. The inclusion of this "outcome" factor in the design allows one to investigate whether the results of prior research on how expectancy-outcome discrepancies affect satisfaction (e.g., Aronson & Carlsmith, 1962;

Ilgen, 1971) can be generalized across both narrow and broad expectancy ranges.

In addition to examining the effect that broadened expectancy ranges have on satisfaction with performance, the present study also examined how the breadth of the expectancy range effected attributional and dissonance strategies. Both of these cognitive balance processes can be used by the individual to influence his or her satisfaction with performance. As was mentioned previously, persons with narrow expectancy ranges are prone to attribute their performance to certain causal factors. Generally, an individual's attributions of causality following task performance are affected by a motivation to view himself positively.

It is conceivable that the breadth of the expectancy range plays a role as a determinant factor in one's selection of causal attributes. A number of ideas in this chapter have introduced probable differences in ability and effort perceptions between individuals with narrow and broad expectancy ranges. It has been suggested that persons with narrow expectancy ranges are less likely to perceive their effort as contributing as much to their performance as those with broader expectancy ranges. Further, research has shown that persons who receive consistent failure feedback are likely to attribute their

performance to their lack of ability (Dweck, 1975); whereas, individuals who receive consistent success feedback are likley to overestimate their abilities (Langer, 1975). Both of these situations reduce the individual's motivation to continue to expend effort to succeed at the task at hand. It is plausible that the breadth of the expectancy range also effect one's weighting of other causal factors as well.

The present study also examined the effect that expectancy ranges had on the likelihood that persons would reduce their dissatisfaction with their performance by utilizing certain dissonance reduction techniques. Individuals use certain dissonance reduction techniques (Festinger, 1957) to protect their self-concept. One way that persons who fail at a task may temper their dissatisfaction with their performance on a task is to devalue its importance. By doing so, a current failure is of little importance.

It is conceivable that by adopting a broader range of expectancies, the individual is in a position where he or she is able to make broader assessments of situational or dispositional factors relative to their performance. Since these persons are more likely to shift their expectancies (Wollert, 1979), it is reasonable to believe that they would be less apt to rely on defensive

attributional or dissonance reduction strategies in order to justify unfavorable performance outcomes.

Chapter 3

METHOD

In this chapter the design, subjects, and procedures of the current study are described.

Overview of Experimental Design

The present study examines expectancy-satisfaction relationships utilizing an expectancy range approach. The experiment employed a 2 x 2 x 2 x 2 factorial design with subject gender, expectancy (low vs. high), variability of feedback scores (low vs. high), and final outcome (low vs. high) as independent variables. The expectancy, variability, and outcome variables were manipulated by presentation of false performance feedback. Half of the subjects received false feedback of minimal variance which narrowed their expectancy ranges. The other half received feedback of greater bidirectional variance, broadening their expectancy ranges. This enabled the present study to examine the effect that broadened ranges of expectancy had on the subjects' satisfaction with performance.

Subjects

Subjects were 68 male and 64 female introductory psychology students at The Pennsylvania State University. All were volunteers who received extra credit towards their final grades for experimental participation. Due to a disk loading error the responses of four of the 68 male subjects were not recorded; these individuals were replaced.

Procedure

Subjects were recruited for a purported pilot testing of a software program. The program was supposedly being developed to measure an individual's ability to make snap personality trait assessments.

To begin the session, the experimenter greeted subjects in groups of 3-4. Subjects were asked to review and sign a consent form concerning their voluntary participation in the study (see Appendix A). The experimenter then presented an introduction to the purported personality trait assessment program via a "cover story" (see Appendix B). The cover story informed the subjects that the study's purpose was to pilot test a software program. This program purportedly measured how

quickly and accurately an individual could make snap personality trait assessments. It was explained that a number of service related agencies were interested in how their employees made decisions about the personalities of persons that they just met. The "trait assessment program" was supposedly being developed to replace paper and pencil assessment measures currently used by agencies to screen perspective employees.

It was emphasized that several pilot evaluations of the program were being conducted prior to field testing the program. Subjects were told that their responses to four embedded questionnaires would be analyzed to determine how user friendly the program was. Thus, the subjects were led to believe that they were taking the actual "trait assessment" test, but that their participation was also designed to obtain input as to characteristics of the trait assessment program.

Following this introduction subjects were escorted individually to separate adjoining rooms which served as experimental stations. Upon entering the room the subject was seated at a table upon which was a personal computer programmed to present the trait assessment program. The experimenter instructed the subject about how to record responses and advance through the program via a keyboard. During the instructions, the experimenter provided a

hands-on demonstration entering the subject's gender and a coded subject participation number. After ensuring the subject understood the instructions, the experimenter left the room and the subject proceeded through the program until completion.

The performance task, carried out on the personal computer, required the subject to evaluate how appropriately 12 trait adjectives described "target individuals" introduced in eleven short narratives. After reading a narrative, the subject indicated how well the trait adjectives (i.e., good, reckless, happy, afraid), which appeared on the screen one at a time, described the target individual. Responses were made on a nine-point scale indicating how well each trait adjective described the target individual (see Appendix C). After rating the twelfth trait adjective, a score which purportedly reflected how quickly and accurately the subject rated the 12 trait adjectives appeared on the screen. The computer program was written to administer a series of false feedback scores according to the subject's randomly assigned treatment condition. (see Appendix D).

The four questionnaires appeared at predetermined intervals during the administration of the program. In order to disguise the true nature of items contained on the questionnaires, subjects were told that the

questionnaires were placed in the program to collect information concerning their evaluation of the "trait assessment" software program. Subjects had also been told that their responses to the various items on the questionnaires would assist the experimenter in further development of the software program. Subject responses to all questionnaire items were recorded on a computer disk.

Prior to displaying the first narrative, the subject was prompted to answer items on a pretask questionnaire. The first questionnaire contained four filler items, and three expectancy range items (see Appendix E). The expectancy items, which appear in the same format on each questionnaire, asked the subject to indicate on a scale of 1 - 100 a low, high, and most likely score that he or she expected to receive on upcoming trials. With exception of these expectancy items, responses to all other questionnaire items were made on a seven-point Likert scale.

Upon completion of the pretask questionnaire, the subject completed the first three performance trials. The feedback received for these first three trials constituted the introduction of the expectancy manipulation. Subjects received either low (43,46,44) or high (73,76,74) scores of minimal variance, separating the subjects into a low or high expectancy group. Each of the feedback scores

purportedly represented a centile score. The score supposedly reflected how quickly and accurately the subject rated the target individual in comparison to a normative sample of subjects who had previously evaluated the program. After receiving the third false feedback score, the subject was prompted to answer items on the second questionnaire. This questionnaire contained two filler items and the three expectancy range items (see Appendix F). The scores received on the next six trials constituted the introduction of the variability manipulation. Over the next six trials, one half of the subjects in each expectancy group received scores of low variability. Their scores continued to vary minimally from the mean expectancy of the first three trials. Low expectancy/low variablility subjects received scores of 45,47,42 46,43,and 48, while high expectancy/low variability subjects received scores of 75,77,72,76,73,and 78. The remaining subjects received feedback scores of high variability. Low expectancy/high variability subjects received scores of 40,58,31,37,63, and 42, while high expectancy/high variability subjects received scores of 70,88,61,67,93,and 72. The high variability scores varied substantially about the mean expectancy of the first three trials. Mean performance was controlled for

across both low (M = 45.16) and high variability conditions (M = 75.16).

Following receipt of the final variance condition score, the subject was prompted to answer items on the third embedded questionnaire. This questionnaire also included two filler items and the three expectancy range items (see Appendix G). On the final two trials the subject received either low (47,43) or high scores (77,73) of minimal variance. The feedback received for these last two trials constituted the introduction of the outcome manipulation. The subject was then prompted to answer items on the fourth, post-task questionnaire. This questionnaire (Appendix H) contained three satisfaction items, four attribution items, and sevaral items that were introduced to explore how persons in the different treatment conditions might reduce dissonance relative to their dissatisfaction with performance outcomes. These items are presented in Chapter 4 as the results for each are described.

The last screen of the program asked the subject to fill out a paper and pencil questionnaire which was located in a folder near the computer terminal. This open-ended questionnaire was used to assess subjects' awareness of the true nature of the study (see Appendix I).

Throughout the session the experimenter remained seated in a hallway outside of the experimental rooms in case any of the participating subjects had questions or difficulty with the program. After the last subject scheduled for the session completed the task, the experimenter asked the subjects to be seated as a group in the room in which they had earlier received the introduction of the study. After reviewing the subjects' responses to the final questionnaire, the experimenter probed for indications of hypothesis guessing. The experimenter then provided each subject with a written explanation of the study (see Appendix J), fully debriefed the subjects concerning the true nature of the study, and responded to questions that the subjects had concerning the study.

Chapter 4

RESULTS

Manipulation Checks

A multivariate analysis of variance (MANOVA) with repeated measures was used to analyze the effectiveness of the false performance feedback manipulations. The subjects' expectations (lowest, highest, and most likely expected scores) and time of measurement served as the within-subject variables. The time of measurement variable reflects the time at which the subjects responded to the expectation items on each of the four questionnaires embedded in the trait assessment program. Subject gender and the treatment factors served as the between-subject variables. The treatment factors to which subjects were randomly assigned were the expectancy (low vs. high), variability (low vs. high), and outcome (low vs. high) feedback manipulations. The treatment conditions utilized in this study reflect the eight possible combinations of the three treatment factors.

As expected, there was a significant treatment condition X time interaction, Wilks' lamda = .059, F (63,716) = 6.09, $p < .001$. This justified further

analysis of the effect of expectancy manipulations within each time period.

Separate 2 (subject gender) X 2 (low vs. high expectancy) X 2 (low vs. high variability) X 2 (low vs. high outcome) analyses of variance with repeated measures (ANOVR) were conducted for each time period. The repeated measures factor consisted of the three levels of the subjects' reported expectancy, that is, their low, likely, and expected scores; this repeated measures factor will be refered to as the "measure" factor. Significant interactions between measure (expectation item scores) and any of the dependent variables were further examined by inspecting analyses of variance (ANOVA) at each measurement level (i.e., separate ANOVAs for lowest expected score, likely expected score, and highest expected score), with the between-subjects factors as independent variables.

Time 1

At Time 1, prior to the introduction of the independent variables and indeed prior to task participation, no effects were expected on the pretest manipulation check on expectancy. ANOVR revealed a measure x variability interaction F (2,224) = 4.12,

$p < .05$. There were no other significant effects. Since the measure x variability interaction was not present in the analysis of the Time 2 expectancies, the presence of this interaction does not appear to represent a threat to randomization. If the measure x variability interaction reflected a real breakdown of random assignment, the interaction should have still been present at Time 2 after the expectancy manipulation had been presented. The measure x variability interaction at Time 2 did not approach significance (F (2,224) = 1.74, $p < .19$). Since this interaction was the only significant effect of the thirty main and interaction effects tested in the model, it is likely to be significant due to chance. Further, there is no plausible way, given the pattern of results, for this effect to account for the findings even if it were a breakdown of randomization.

The lowest, likely, and highest expected scores means prior to feedback manipulations were 51.18, 70.62 and 85.98, respectively.

Time 2

At Time 2, subjects had received three low (43,46,44) or high (73,76,74) false feedback scores, constituting the introduction of the expectancy manipulation. As expected

the ANOVR revealed a large main effect of expectancy, F (1,112) = 449.87, $p < .0001$, such that, on the average, subjects in the high expectancy condition reported higher expectancies. However, the ANOVR also revealed a significant measure x expectancy interaction F (2,224) = 4.46, $p < .02$. Subsequent ANOVAs revealed significant expectancy effects at each level of measurement. Subjects who received high expectancy scores reported higher expected scores at each level of measurement, F (1,112): low expected score, F = 178.40; likely expected score, F = 597.81; high expected score, F = 180.90, all $p < .0001$. This first expectancy manipulation was effective. Subjects' lowest, likely, and highest expected scores varied directly as a consequence of their receiving low or high feedback scores. Table 1 displays the subjects' expected score means before and after the expectancy manipulation. The means show the expectancy effects at Time 2 are primarily due to the low expectancy groups' expected score ratings going down.

In addition to the preceding results, the ANOVR on Time 2 expectancies also revealed a measure x expectancy x variability x outcome interaction, F (2,224) = 10.86, $p < .001$. This interaction was not present at Time 3. Since this was the only significant interaction and it did not replicate at either Time 1 (F (2,224) = 1.78,

$p < .17$) or Time 3 (F (2,224) = 1.22, $p < .29$), its presence is likely to be due to chance. This interaction does not appear to be a threat to randomization.

Table 1

Mean Expected Scores Before and After the Expectancy Manipulation

	Time 1 Prior to Expectancy Manipulation	Time 2 Following Expectancy Manipulation	
Expected Score		Expectancy Group	
		Low	High
Lowest	51.18	38.45	58.38
Likely	70.62	50.61	74.38
Highest	85.98	63.48	83.29

Time 3

At Time 3, the high vs. low expectancy manipulation persisted. Accordingly their was a significant expectancy effect (F (1,112) = 1489.49, $p < .0001$) and a marginally

significant measure x expectancy interaction (F (2,224) = 2.83, $p < .06$), consistent with the findings at Time 2. In addition, at Time 3, subjects had received a series of six false feedback scores of low and high expectancy, and of low or high variability. It was expected that subjects receiving low variability feedback would report narrow expectancy ranges. In contrast, it was expected that subjects receiving high variability would broaden their expectancy ranges.

As expected, ANOVR revealed a measurement x variability interaction F (2,224) = 53.48, $p < .001$. There was also a significant main effect of variability, F (1,112) = 4.99, $p < .05$. Subsequent ANOVAs, conducted at each level of measurement, revealed significant variability effects for the low expected score F (1,112) = 506.32; likely expected score F (1,112) = 1837.93; and high expected score F (1,112) = 433.77, all $p < .001$. As shown in the right side of Table 2, subjects in the high variability condition reported having more extreme high and low expected scores; that is, they had a broader range of expectancies. At Time 3 the difference between the lowest and highest expectancy is about 15 in the low variability condition. In contrast, the expectancy range varies about 30 points in the high variability condition.

Table 2

Mean Expectation Scores Before and After the Variability Manipulation

	Time 2 Prior to Variability Manipulation	Time 3 Following Variability Manipulation	
Expected Scores		Variability	
Low Expectancy Group		Low	High
Lowest	38.45	39.65	33.56
Likely	50.61	46.06	47.96
Highest	63.48	55.43	64.34
High Expectancy Group			
Lowest	58.38	65.00	59.87
Likely	74.38	74.49	75.62
Highest	83.29	80.90	89.19

Despite the fact that the feedback in the low and high variability conditions had the same means across variability conditions, the high variability subjects also reported slightly higher, but clearly significant estimates of their most likely score.

Time 4

At Time 4, subjects had received low or high expectancy scores, low or high variability scores, and two low (47,43) or high (77,73) outcome scores. Several effects observed at Time 4 reflected the persistence of maninpulations introduced earlier. A main effect of expectancy (F (1,112) = 340.94, $p < .0001$) and a measure X expectancy interaction (F (2,224) = 2.83, $p < .06$) were observed; these effects reflect the persistence of the expectancy effect first observed at Time 2. The ANOVR also revealed a significant measure x variability interaction (F (2,224) = 35.79, $p < .001$) and a main variability effect (F (1,112)= 9.34, $p < .01$); these represent the variability effect noted for Time 3, as displayed in Table 2. Thus, the effects of variability also persisted at Time 4. Regardless of the level of outcome scores received, high variability subjects continued to report their expectancy ranges as broader

than the expectancy ranges reported by low variability subjects.

In addition to these results, the ANOVR revealed main effects for gender and outcome. It was found that females rated their expected scores ($\underline{M}$ = 63.72) lower than males had rated them ($\underline{M}$ = 65.57), $\underline{F}$ (1,112) = 3.96, $\underline{p} < .05$. Further, it was found that high outcome subjects rated their expected scores ($\underline{M}$ = 67.89) higher than low outcome individuals ($\underline{M}$ = 61.42), $\underline{F}$ (1,112) = 48.58, $\underline{p} < .0001$.

The outcome effect was conditioned by an expectancy x outcome interaction. The ANOVR also revealed a measure X expectancy X outcome interaction, $\underline{F}$ (2,224) = 21.23, $\underline{p} < .01$. ANOVAs conducted at each level of measurement revealed that the expectancy x outcome interaction effected subjects' likely ($\underline{F}$ (1,112) = 14.47, $\underline{p} < .001$) and highest expected score ratings ($\underline{F}$ (1,112) = 39.51, $\underline{p} < .0001$) and, to a lesser extent, their lowest expected score ratings ($\underline{F}$ (1,112) = 3.20, $\underline{p} < .08$). The means for the measure x expectancy x outcome interaction are included in Table 3.

Mean comparisons were conducted for each level of the measure factor. Among those receiving high expectancy scores there was a significant outcome effect for lowest expected score ratings. It appears that initial high

Table 3

Mean Expected Scores as a Function of Expectancy Level and Outcome at Time 4

	Expected Score					
	Lowest		Likely		Highest	
	Outcome					
	Low	High	Low	High	Low	High
Expectancy						
High	56.03 g,h,i	65.38 d,e,f	73.47 c,d,e	75.22 a,b,c,d	84.63 a,b	84.66 a
Low	40.22 j	43.84 j	51.63 h,i	61.78 f,g	62.53 f,g	76.47 a,b,c

Note: Means with the same letter designation do not differ at the $p < .05$ level based on a Newman-Keuls follow-up test.

expectancies in part "innoculated" the high expectancy subjects from the effect of low outcome feedback. Low outcome feedback effected only the high expectancy group's lowest expected score ratings. High expectancy subjects' likely and highest expected score ratings were essentially the same across outcome conditions. The pattern of effects across the three levels of expectancy measures is just the opposite for low expectancy subjects. Low expectancy subjects' lowest expected score remained the same, but their likely and highest expected estimated were raised after receiving high outcome feedback. The pattern seems to indicate that subjects were affected by the outcome manipulation, but the effect of the outcome factor was tempered by subjects' optimism. This point will be returned to in the discussion.

The analysis also revealed a significant variability x outcome (F (1,112) = 7.21, $p < .01$) and expectancy x variability x outcome (F (1,112) = 5.95, $p < .02$) interactions. Since the variability x outcome interaction occurred in the context of the expectancy x variability x outcome interaction, only the details of the latter 3-way interaction is reported. This interaction and the results of a Newman-Keuls follow-up test are included in Table 4.

Looking at the effect of outcome within conditions at the same level of expectancy and variability, the

follow-up tests revealed that outcome has an effect only on the low variability-low expectancy subjects. These subjects who have had no other exposure to high scores, were influenced by the outcome variable. Among subjects who had some prior exposure to high scores, either through the high expectancy or high variability manipulation, outcome had no effect. In other words, the receipt of high outcome scores, during either the variability or outcome manipulations, facilitated an upward shift of expected scores for both expectancy groups.

The expectancy shifts as displayed in Table 3 and Table 4 seem to have indicated that any indication of improved performance facilitates a substantial upward adjustment of the low expectancy group's expectation scores. It appears as if the low expectancy subjects only needed a glimpse of improved performance to optimistically shift their expectation scores.

Satisfaction with Performance

Satisfaction with performance was measured utilizing a multiple item satisfaction index. This index included responses to three questions presented on the post-task questionnaire (see items 5,7,8, Appendix H). The first item asked subjects to rate how satisfied they were with

Table 4

Mean Expected Scores as a Function of Expectancy Level, Variability of Feedback, and Outcome at Time 4

	Low Variability		High Variabiltiy	
	Outcome		Outcome	
	Low	High	Low	High
High	70.65	74.52	72.11	75.47
Expectancy	a,b,c,d	a,b	a,b,c	a
Low	46.86	60.92	56.07	60.48
	g	d,e	e,f,g	e,f

Note: Means with the same letter designation do not differ at the $p < .05$ level based on a Newman-Keuls follow-up test.

their overall performance. The second item asked subjects to rate how well they thought they performed in comparison to others who had taken the "trait assessment" test. The third item asked subjects to rate how good they thought their performance was overall. The three satisfaction measures were summed, reverse scoring where appropriate. Thus the scaled satisfaction scores could range from 3 to 21, with higher numbers representing greater satisfaction with overall performance. Reliability analysis of this three-item index revealed a Cronbach alpha coefficient of .77.

An ANOVA was conducted on the satisfaction index to examine the effect that broadened expectancy ranges had on satisfaction with performance. A 2 (subject gender) X 2 (low vs. high expectancy) X 2 (low vs. high variability) X 2 (low vs. high outcome) ANOVA revealed main effects of expectancy, variability, and outcome. Subjects in the low expectancy group ($\underline{M}$ = 9.39) were less satisfied with their performance than were subjects in the high expectancy group ($\underline{M}$ = 12.50), $\underline{F}$ (1,112) = 41.40, $\underline{p} < .001$. Subjects who received low variability feedback ($\underline{M}$ = 10.39) were less satisfied with their performance than were subjects who received feedback of high variability ($\underline{M}$ = 11.50), $\underline{F}$ (1,112) = 5.23, $\underline{p} < .025$. This result supports the satisfaction hypothesis. As predicted, subjects who

received high variability feedback, broadening their expectancy ranges, reported greater satisfaction with performance. Further, subjects who received low outcome scores (M = 9.67) were less satisfied than subjects receiving high outcome scores (M = 12.22), F (1,112) = 27.57, $p < .001$.

The ANOVA also revealed a significant expectancy X outcome interaction, F (1,112) = 6.81, $p < .025$. A graph of this interaction is presented at Figure 1.

A Newman-Keuls procedure was selected for the follow-up tests. The follow-up tests indicated that subjects who received high expectancy and high outcome scores (M = 14.40) were significantly more satisfied with their performance than were subjects who received low expectancy and low outcome scores (M = 8.75). No other significant differences were revealed among the remaining groups.

Analyses of Attribution Items

Several ANOVAs were conducted to examine the effect that broadened expectancy ranges had on the subjects' attributional strategies. Separate 2 x 2 x 2 x 2 (gender x expectancy x variability x outcome) ANOVAs were conducted with luck, effort, difficulty, and ability as

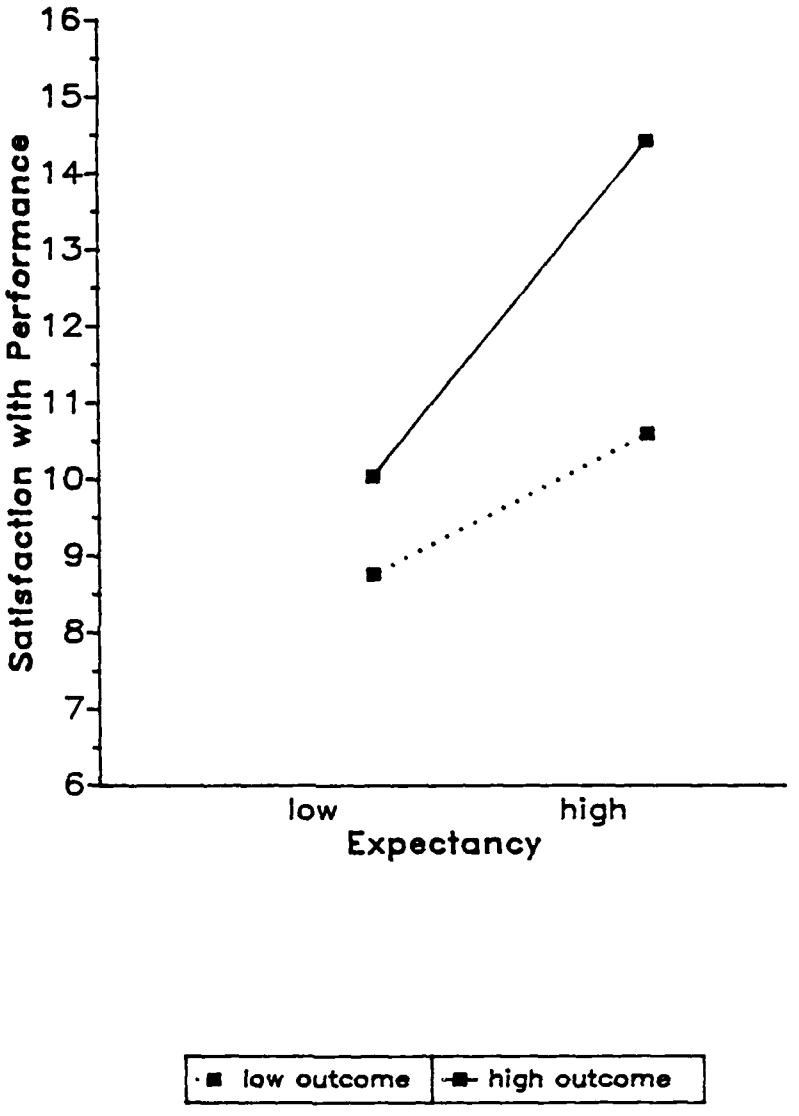

Figure 1. Mean Satisfaction as a Function of Expectancy Level and Outcome

the respective dependent variables (See items 1 - 4, Appendix H). This exploratory search involved attempts to locate effects that would indicate that attributional processes might mediate the hypothesized satisfaction effect. Given the simple main effect of variability on satisfaction, this search was conducted to look for a similar main effect on these two prospective mediators.

These analyses revealed no significant main or interaction effects for luck, and a main effect of expectancy for task difficulty. Subjects who received low expectancy scores ($\underline{M}$ = 4.92) indicated that task difficulty contributed more to their overall performance than did subjects receiving high expectancy scores ($\underline{M}$ = 4.65), $\underline{F}$ (1,112) = 4.19, $\underline{p} < .05$.

The ANOVA conducted on the effort variable revealed a main effect of outcome. Subjects who received high outcome scores ($\underline{M}$ = 4.98) indicated that their effort contributed more to their overall performance than did subjects who received low outcome scores ($\underline{M}$ = 4.34), $\underline{F}$ (1,112) = 6.45, $\underline{p} < .025$. Further, there was a significant gender X variability X outcome interaction, $\underline{F}$ (1,112) = 4.18, $\underline{p} < .05$. This interaction is displayed at Figure 2. A Newman-Keuls procedure indicated that males who received low variability and high outcome scores ($\underline{M}$ = 5.50) felt that their effort contributed

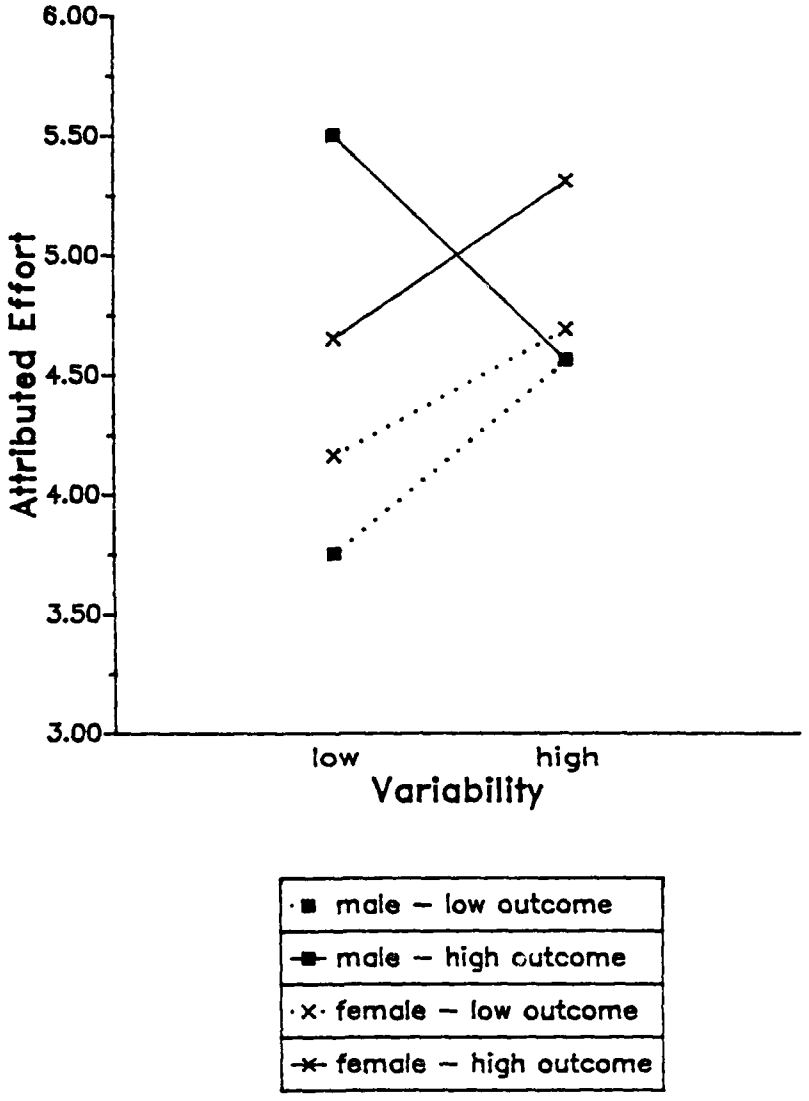

Figure 2. Mean Attributed Effort as a Function of Gender, Variability of Feedback, and Outcome

significantly more to their performance than males who received low variability and low outcome scores (M = 3.75). No other significant differences were revealed among the remaining groups.

The ANOVA conducted on the ability variable revealed a main effect of outcome. Subjects receiving high outcome scores (M = 5.25) indicated their ability contributed more to their overall performance than did subjects receiving low outcome scores (M = 4.64), F (1,112) = 5.73, $p < .025$. In addition to this result, the ANOVA revealed a gender X variability X outcome interaction F (1,112) = 7.63, $p < .025$. This interaction is displayed at Figure 3. A Newman-Keuls procedure indicated that females who received high variability and high outcome scores (M = 5.56) felt that their ability contributed significantly more to their performance than females who received high variability and low outcome scores (M= 4.13) and males who received low variability and low outcome scores (M = 4.19). No other significant differences were revealed among the remaining groups.

Although variability of feedback was involved in two of the item analyses, the findings do not provide evidence that subject attributional responses differed significantly due to variability of feedback. These findings do not

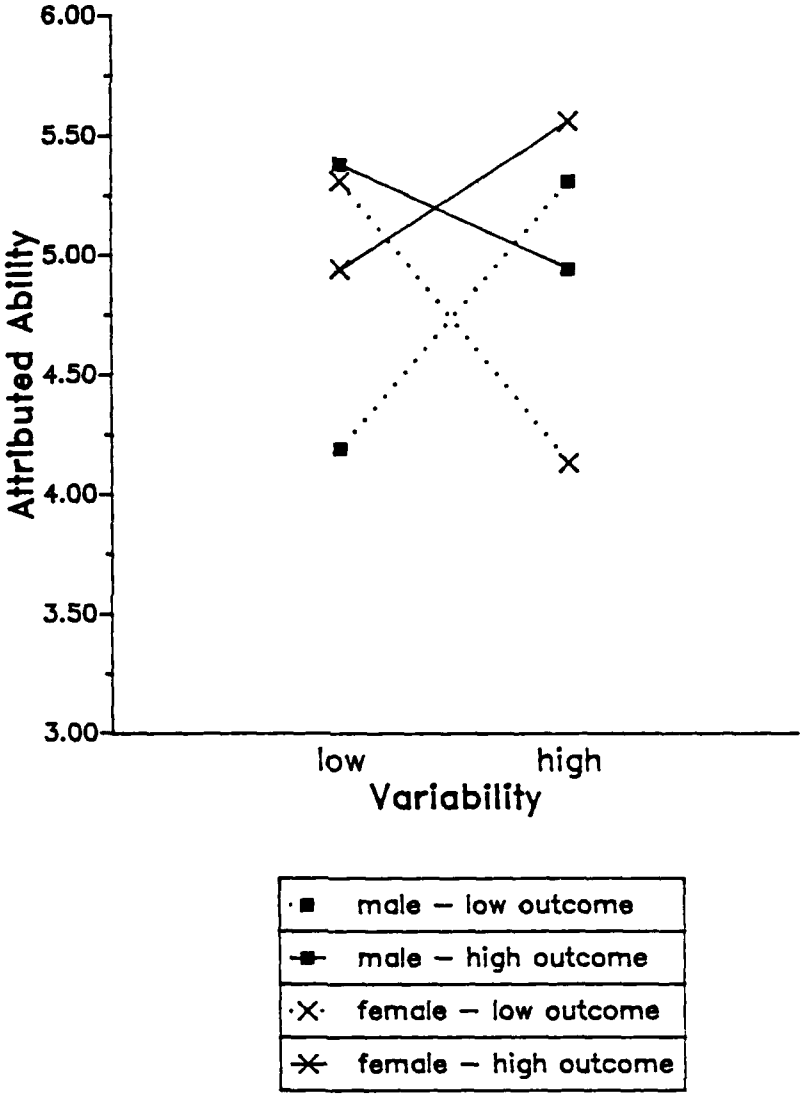

Figure 3. Mean Attributed Ability as a Function of Gender, Variability of Feedback, and Outcome

support the contention that attributional strategies might have mediated the hypothesized satisfaction effect.

Analyses of Dissonance Reduction Items

Five items (questions 9, 10, 11, 13, 16, Appendix H) were analyzed to explore the effects that expectancy ranges may have on the likelihood that individuals would reduce their dissatisfaction with performance by devaluing the validity of the task or the abilities that the task purportedly measured. Separate 2 x 2 x 2 x 2 (gender X expectancy X variability X outcome) ANOVAs were conducted with ability to make trait assessments, ability to make snap judgments, importance of an ability to make trait assessment, importance of an ability to make snap judgments and validity of the trait assessment measure as respective dependent variables.

The ANOVA concerning subjects' ratings of their general ability to make trait assessments revealed a significant main effect of gender and a marginally significant effect of expectancy. Males rated their ability to make trait assessments higher ($\underline{M}$ = 5.17) than did females ($\underline{M}$ = 4.06), $\underline{F}$ (1,112) = 6.93, $\underline{p} < .01$. Further, subjects in the high expectancy condition ($\underline{M}$ = 5.08) tended to rate their ability to make trait

assessments higher than did subjects in the low expectancy condition (M = 4.67), F (1,112) = 3.25, $p < .08$. The ANOVA concerning subjects' ratings of the importance of an ability to make trait assessments revealed no significant main effects or interactions.

The ANOVA concerning subjects' ratings of their ability to make snap judgments revealed main effects of gender and expectancy. Males rated their ability to make snap judgments higher (M = 4.83) than did females (M = 4.14), F (1,112) = 8.48, $p < .01$. Subjects in the high expectancy group rated their general ability to make snap judgments higher (M= 4.75) than did subjects in the low expectancy group (M = 4.21), F (1,112) = 5.06, $p < .05$.

The ANOVA concerning subjects' ratings of the importance of an ability to make snap judgments revealed a significant gender x variability x outcome interaction, F (1,112) = 7.81, $p < .01$. A graph of this interaction is displayed at Figure 4. Again, a Newman-Keuls procedure selected for follow-up tests.

The follow-up tests indicated that females who received high variability and low outcome scores (M = 5.69) rated the importance of an ability to make snap judgements significantly higher than females who received low variability and high outcome scores (M = 4.06).

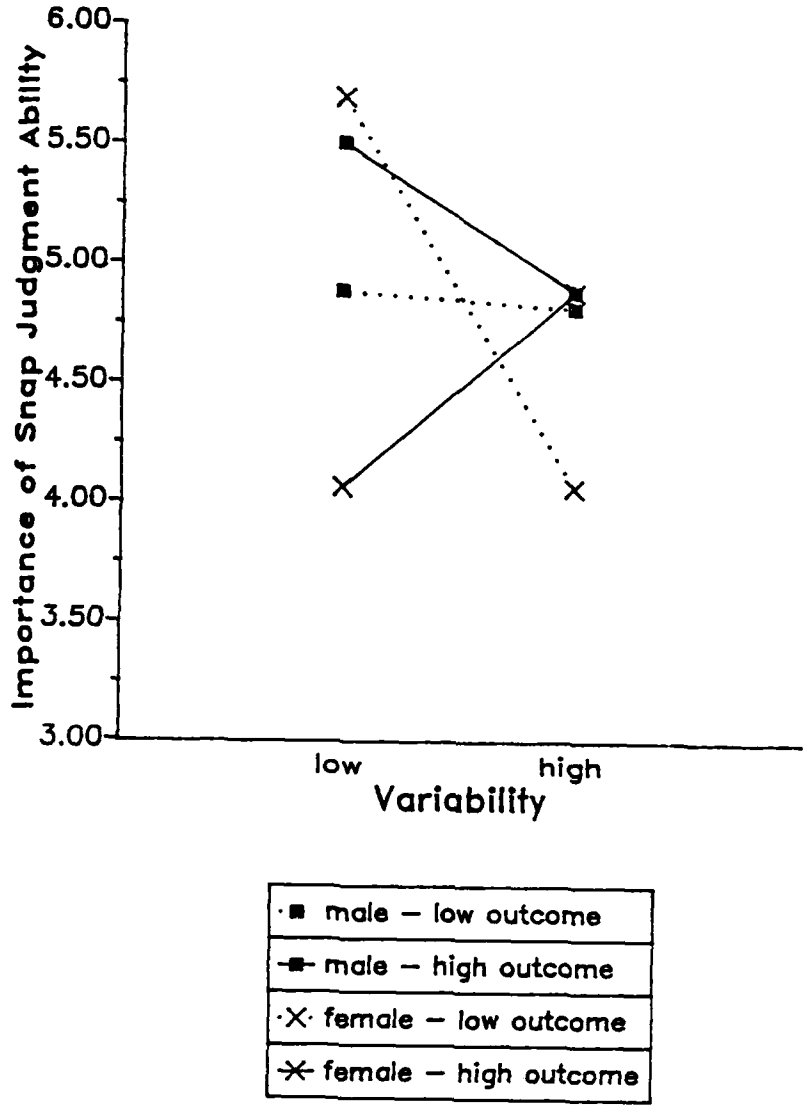

Figure 4. Mean Ratings of the Importance of an Ability to Make Snap Judgments as a Function of Gender, Variability of Feedback, and Outcome

No other significant differences were indicated among the other groups.

Finally, an ANOVA concerning subjects' ratings of whether or not they considered the "trait assessment program" a valid measure of trait assessment abilities revealed a main effect of expectancy. Subjects in the high expectancy condition ($\underline{M}$ = 4.24) considered the "trait assessment program" a more valid measure than did subjects in the low expectancy condition ($\underline{M}$ = 3.77), $\underline{F}$ (1,112) = 5.99, $\underline{p} < .02$.

It does not appear that the variability of feedback manipulation influenced subjects' ratings concerning the validity of the "trait assessment" program or the abilities it supposedly measured. The above results indicate that the subjects' ratings on the dissonance items were influenced by subject gender and early expectancy feedback. These findings do not support the contention that a dissonance reduction process might have mediated the hypothesized satisfaction effect.

Chapter 5

DISCUSSION

Expectancy Ranges and Satisfaction

The present study examined the effect that broadened expectancy ranges have on satisfaction with performance. It was hypothesized that subjects with broadened expectancy ranges would experience greater satisfaction with their performance than those who maintained narrow expectancy ranges. The results of an analysis of subject responses to a three-item satisfaction rating scale supported this hypothesis. As predicted, subjects in the high variability condition reported broader expectancy ranges and greater satisfaction with performance. The results indicated that the variability of feedback influenced subjects' satisfaction with performance.

Explanations of the Satisfaction Effect

In addition to the indices of satisfaction with performance, the present study also examined the effect that broadened ranges of expectancy have on attributionaland dissonance reduction strategies that

might mediate the hypothesized satisfaction effect. Analyses of the attributional and dissonance reduction items revealed that variability of feedback had some influence on subjects' effort and ability attributions, as well as ratings concerning the importance of an ability to make snap judgments. The variability of feedback variable was involved in a three-way interaction in each case. Follow up tests revealed no significant differences in subjects' mean responses to these items due to variability. Analyses of the attribution and dissonance items revealed no conclusive evidence indicating that either of these processes were plausible mediators of the satisfaction effect.

It is possible that subjects who were dissatisfied with their performance did not utilize self-enhancing cognitive strategies to justify their poor performance because they knew that their experimental participation was completed. Wortman, Costanzo, and Witt (1973) noted that even though other studies have shown that individuals adopt self-enhancing strategies after succeeding or failing at a certain task (see, e.g., Fitch , 1970), an individual's propensity to adopt self-enhancing strategies is effected substantially by his or her anticipation of future performance. Subjects in the present study did not anticipate having to continue performing the task.

Therefore, subjects may not have been motivated to make self-enhancing attributions. More generally, attributions concerning one's performance after task completion are not necessarily the same as those held through the course of performing the task.

Another potential explanation for the satisfaction effect is related to the measure X expectancy x outcome interaction concerning subjects' expected score ratings at Time 4. As seen in Table 4, it appears that initial high expectancies "innoculated" the high expectancy subjects from the effect of low outcome feedback. Receipt of low outcome scores only effected the high expectancy group's lowest expected score ratings. Adjustments to the high expectancy group's expectancy range only involved a downward shift in their lowest expected score. High expectancy subjects' mean likely and highest expected scores were essentially the same across outcome conditions. The pattern of expectation measure shifts was just the opposite for low expectancy subjects who received high outcome condition scores. The lowest expected scores were not different for low expectancy groups across outcome conditions. However, low expectancy subjects raised their likely and highest expected score estimates after receiving high outcome feedback.

Subjects' satisfaction with performance seems to have involved trade-offs between realism and optimism. Consider first the high expectancy subjects who had received a number of good scores. Upon receipt of low outcome scores the high expectancy subjects "optimistically" retained their likely and highest expected scores and "realistically" adjusted their lowest expected score. In contrast, low expectancy subjects who received high outcome scores "realistically" retained their lowest expected score and "optimistically" shifted their likely and highest expected scores. It is conceivable that these realistic and optimistic shifts affected the subjects' perceptions of past performance. In turn, these perceptions influenced satisfaction with performance.

The results of the present study also support the interpretation that optimism might mediate the relationship between expectancy range and satisfaction. As shown in Table 2, low and high expectancy groups' expectancy ranges were broadened after receipt of high variability feedback. The low expectancy group lowered their lowested expected score estimates and both expectancy groups raised their highest expected score estimates. Interestingly, groups who received high variability feedback also raised their <u>likely</u> expected

score estimates. Even though performance was objectively the same across variability conditions, persons who received high variability feedback were more optimistic about their performance. This sense of optimism may have mediated satisfaction with performance.

Conclusions

If the only measurement of expectation was a single point estimate, which in this study would be the likely expected score, the effects that the various feedback manipulations had on expectancy shifts and satisfaction with performance would have been overlooked. Conceptualization of the expectancy as a range of plausible outcomes and the introduction of multiple expectation measures proved to be a worthwhile approach in the examination of expectancy-satisfaction relationships. The present study's findings have implications that support the notion that expectancy should not be defined on a single-estimate dimension alone.

Feather (1982) suggested that persons could express a similar single estimate of success and have different ranges of alternative probable outcomes. The current study found that the breadth of the distribution of plausable "expected scores" influences satisfaction with

performance, such that the broadening of situationally manipulated low and high expectancy ranges increased satisfaction with performance. Future research could further develop our understanding of expectancy - satisfaction relationships by exploring how individuals develop and change their expectancy ranges in real life settings. There are undoubtedly several variables that influence the formation, maintenance, and shift of expectancies contained within the expectancy range.

Further, there are conceivably a number of limitations concerning the optimal characteristics of an expectancy range, including the distributional pattern of plausible outcomes within the expectancy range. The current study took three measurements of expectancy. These are snapshots, so to speak, that roughly sketched a range of plausible outcomes. The end points of the range were represented by the lowest and highest expected scores. The likely score represented a measure of central tendency. The current study addressed the importance of considering the breadth of the expectancy range as an important feature that influences satisfaction with importance. It is conceivable that an equally important feature is the distribution of plausible outcomes within the expectancy range. Under certain circumstances, the breadth of the expectancy range is a good indicator of

confidence that one will succeed or fail in upcoming tasks. However, it may be that not all expectancy ranges are alike: There may be bimodal expectancy distributions that have different effects than unimodal expectancies for example. In other words, there may be patterns of plausible outcomes which provide additional information concerning expectancy-satisfaction relationships.

Pursuant to Lisenmier and Brickman's (1980) research challenge, it is suggested that an expectancy range approach may provide future investigators a conceptual measurement tool with which they can study how people balance the desireable features of high expectations and low expectations.

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Appendix A

CONSENT FORM

Informed Consent
Personality Trait Assessment

I _____, agree to participate in the study being conducted by David C. Enders/Annette Rebert under the direction of Dr. Melvin M. Mark. I know that I will read descriptive narratives concerning several individuals and then will rate how well a list of personality traits describe each person.

I know that my responses will be held in confidence. I know that I am free to discontinue my participation at any time, without penalty. I know that the entire hypothesis will be discussed with me at the end of the study since this knowledge, prior to participation, may bias my responses. I know that the entire study takes about 45 minutes and that I will receive one credit.

Signed _____

Date _____

Experimenter _____

Date _____

Appendix B

COVER STORY

Hi I'm (E), I have been working with Dave Enders, a graduate student in the Psychology Department, in the development of a personality trait assessment program. We are studying the process by which people make snap judgments about others that they have just been met. These personality judgments are made all of the time. Informally... say in meeting people at a party, and formally... like in job interviews. Without having to think back too far you can probably think of times when you made snap personality judgments. Like at a large party where there a a lot of people around that you don"t know. Maybe you'll stand around and check people out before you introduce yourself. Look them over, get close enough to hear what kind of things they are interested in before the introductions.

The task that you will perform in a moment asks you to make a number of judgments about people that you have just learned something about. As I've said, we are interested in how snap personality judgments are made. One of the things that we are doing is to come up with a less cumbersome method of assessing personality judgments. Instead of pencil and paper measures, we using a computer-assisted measure. It turns out that a lot of people are interested in how their employees come to make quick decisions about people. Retailers, investment firms, police departments, social service agencies are but a few of the consumers of personality trait assessment programs.

By putting the programs on software we think that we'll have a desirable alternative to the pencil and paper measures currently being used. Currently trait assessment programs are conducted by consultants. They are hired by industry or service agencies to come in and administer a pencil and paper trait assessment tests. Then the consultant disappears for a couple of weeks to score the tests. The consultant makes a return visit with the scored results and takes an additional hour or so telling the client how the scores are interpreted. We hope our program proves to be a flexible and cost-effective option.

To make that statement with confidence we have to test and retest the program, recording and taking a hard look at responses from subjects like you. From here we'll go into adjoining rooms where we have our computers set up. The program contains specific instructions to walk you

through personality assessments you will make on several people. Included in the program are questionnaires that help us in the development of a program for field testing. Basically you'll read several short narratives about different kinds of people. After each narrative you will rate several descriptive terms as to how well the terms fit or describe that person. A score is quickly calculated and displayed on the screen after each trial.

The responses that you make are calculated and measure how accurately and quickly you rated a target individual. The score that you will see following each trial is a centile score. It indicates how your performance on that trial ranks in comparison to others. For example, say a 50 appears on the screen at the end of a trial. That tells you that fifty percent of subjects in your norm group would have judged the individual's personality traits more quickly and accurately than you had. On the other hand, you had performed better than forty-nine percent of persons in your norm group. After you take the task, I'll give you more information on how the norms are established and the scoring system is set up.

Before I take you to rooms where we have our computers set up I'd like each of you to take a few moments to read and sign this form. (E distributes informed consent form, waits for subjects to review and sign. E collects informed consent forms and issues participation credits.)

The trait assessment program is written with complete instructions. You are given directions on screen that tells you which keys to use to record your response and how to proceed to the next step in the program. Let me give you a quick demonstration. (E holds up a terminal keyboard, pointing to appropriate keys.) You'll be rating the descriptive terms and answering items on the questionnaires by entering a number from a scales which will be explained on the screen. Record your response by pressing an appropriate numbered key which are found here above the lettered keys. After pressing a numbered key, your response is recorded when you press the return key which is located here. Occasionally, you'll see a message at the bottom of the screen which prompts you to advance to another step in the program. Those messages will tell you to press the spacebar to continue. The spacebar is located here. Lets get started. Follow me. (E takes the subjects as a group to adjoining rooms where computers are set up. Stopping at the door to the first room, E asks two subjects to wait for a moment in the hallway while E gets the first subject started. In turn, E asks one subject to wait for a moment in the hall while getting the second subject started. Then takes third subject to last room. Upon entering each of the rooms serving as an

experimental site, E has subject take a seat at the computer terminal and issues the following instructions.)

The program is loaded. I just have to type in the first few entries. (E types in subject number, subject's sex, and treatment condition.) Remember to rate the terms you'll hit an appropriate numbered key, located on this row, and hit he return key located here. That one is the spacebar. (E points to appropriate keys.) If you have any questions or need assistance, I'll be seated out in the hall. You may begin.

Appendix C

TASK EXAMPLE

Target Description

Clara works full-time as a legal secretary and volunteers four hours a week helping out in a community center for the elderly. She started as a volunteer a year ago and has enjoyed helping senior citizens by assisting them in filling out tax and medical insurance claim forms. Last week Clara was offered a desirable job with a corporate firm across town. With the added responsibilities of her new job and the longer commute to and from work, she would no longer be able to volunteer time at the community center. Clara called the community center's director and informed him that she would no longer be able to volunteer her services at the center. The director asked that Clara consider staying on a few more months. Clara explained that she just wouldn't be able to. The conversation continued for several minutes. It seemed as if the director just couldn't take no for an answer. Clara felt that she didn't have to justify her reasons for taking a new job. She interrupted the director in mid-sentence stating, "No. I just can't", and hung up the phone.

Press Spacebar to Continue

(After the subject has read the target description the rating scale appears on following screen)

Please indicate how well each term describes Clara by typing a number from the scale in the blank beside each term.

This term describes Clara:

1	2	3	4	5	6	7	8	9
Extremely poorly			Neither poorly nor well				Extremely well	

Record your rating for each term that follows by entering a single number from 1 - 9. The next term will appear immediately following your response. Your score is determined in part by the response time for each item. Make your ratings as quickly and accurately as possible.

Review the scale again..then press the spacebar when you are ready for the terms to appear.

(After the spacebar is pressed the trait adjectives appear on the screen. Each screen displays the nine-point scale and one of the below listed trait adjectives. After the subject records a number from 1 - 9 beside the trait adjective displayed, the next trait adjective appears on the screen.)

good ___

constructive ___

responsible ___

careful ___

imaginative ___

cheerful ____

reckless ___

thankful ____

rash ____

happy ____

constructive ____

afraid ____

(After the subject has rated the last trait adjective, the "computed" performance score for that trial appears on the screen.)

Appendix D

FEEDBACK BY TREATMENT CONDITIONS

Treatment Condition	Expectancy	Variability	Outcome
1	Low	Low	Low
2	Low	Low	High
3	Low	High	Low
4	Low	High	High
5	High	Low	Low
6	High	Low	High
7	High	High	Low
8	High	High	High

Expectancy	Variability	Outcome
	Low	
	45,47,42,46,43,48	Low
Low		47,43
43,46,44,47	High	High
		77,73
	40,58,31,37,63,42	
	Low	
	75,77,72,76,73,78	Low
High		47,43
73,76,74,77		High
	High	77,73
	70,88,61,67,93,72	

Appendix E

PRETASK QUESTIONNAIRE

In the space provided below each of the scales, type in the appropriate number that best represents your impression:

1. The instructions given by the experimenter were clear.

1	2	3	4	5	6	7
stongly disagree			neither agree nor disagree			strongly agree

Rating ___

2. The program instructions just displayed on the screen can be understood without the experimenter having gone over them in detail.

1	2	3	4	5	6	7
strongly disagree			neither agree nor disagree			strongly agree

Rating ___

3. I expect that my performance will be:

1	2	3	4	5	6	7
very inaccurate			moderately accurate			very accurate

Rating ___

4. On a scale from 1 - 100, indicate how low and how high that you expect your scores on upcoming trials may be. Then list what you consider your best guess. That is a score that you most likely expect to receive.

On a scale from 1 - 100,
indicate the lowest score you would expect to receive _____

On a scale from 1 - 100,
indicate the highest score you would expect to receive ____

On a scale from 1 - 100,
indicate the score you most likely would expect to receive _____

Appendix F

PERFORMANCE QUESTIONNAIRE # 1

In the space provide below each of the scales, type in the appropriate number that best represents your impression.

1. The instructions on how to use the rating scales are clear.

1	2	3	4	5	6	7
strongly disagree			neither agree or disagree			strongly agree

Rating ___

2. The target descriptive narratives are written at a reading level approriate for persons with my level of education.

1	2	3	4	5	6	7
strongly disagree			neither agree *or disagree*			strongly agree

Rating ___

3. On a scale from 1 - 100, indicate how low and how high you expect that you scores on upcoming trials might be. The list what you would consider your best guess. That is a score that you would most likely expect to receive.

On a scale from 1 - 100,
indicate the lowest score you would expect to receive ___

On a scale from 1 - 100,
indicate the highest score you would expect to receive ___

On a scale from 1 - 100,
indicate the score you would most likely expect to receive ___

Appendix G

PERFORMANCE QUESTIONNAIRE # 2

In the space provided under each of the scales below, type in an appropriate number that represents your impression.

1. A wide variety of personality types have been presented.

1	2	3	4	5	6	7
strongly disagree			neither agree or disagree			strongly agree

Rating ___

2. One or more of the target individuals reminds me of someone I know.

1	2	3	4	5	6	7
strongly disagree			neither agree or disagree			strongly agree

Rating ___

3. On a scale from 1 - 100, indicate how low and how high you expect that your scores on upcoming trials might be. Then list what your consider to be your best guess. That is a score that you would most likely expect to receive.

On a scale from 1 - 100,
indicate the lowest score you would expect to receive ___

On a scale from 1 - 100,
indicate the highest score you would expect to receive ___

On a scale from 1 - 100,
indicate the score you would most likely expect to receive ___

Appendix H

POST-TASK QUESTIONNAIRE

In the space provided below each of the scales below, type in an appropriate number that best represents your attittude about the task.

1. My performance was due to luck (good or bad).

1	2	3	4	5	6	7
strongly disagree			neither agree or disagree			strongly agree

Rating ___

2. My performance was due to effort (or lack of effort).

1	2	3	4	5	6	7
strongly disagree			neither agree or disagree			strongly agree

Rating ___

3. My performance was due to how difficult (or easy) the task was.

1	2	3	4	5	6	7
strongly disagree			neither agree or disagree			strongly agree

Rating: ___

4. My performance was to to my ability (or lack of ability).

1	2	3	4	5	6	7
strongly disagree			neither agree or disagree			strongly agree

Rating ___

5. My performance satisfied me:

1	2	3	4	5	6	7
very little			moderately			very much

Rating __

6. If I were to retake the task, my performance would be:

1	2	3	4	5	6	7
much worse			about the same			much better

Rating ___

7. Overall, I think my performance was good.

1	2	3	4	5	6	7
strongly disagree			neither agree or disagree			strongly agree

Rating ___

8. How well do you think that most people performed on this task?

1	2	3	4	5	6	7
much worse than I did			about the same as I did			much better than I did

Rating ___

9. In general, think that my ability to make snap judgments is good.

1	2	3	4	5	6	7
strongly disagree			neither agree or disagree			strongly agree

Rating ___

10. I think that an ability to make snap judgments is important.

1	2	3	4	5	6	7
strongly disagree			neither agree or disagree			strongly agree

Rating ___

11. In general, I think that my ability to make personality trait assessments is good.

1	2	3	4	5	6	7
strongly disagree			neither agree or disagree			strongly agree

Rating ___

12. On a scale of 1-100, indicate how low and how high that your scores might be if given the opportunity to retake this task. Then list what you would consider your best guess. That is a score that you would mosty likely expect to receive.

On a scale from 1-100,
indicate the lowest score you would expect to receive ___

On scale from 1-100,
indicate the highest score you would expect to receive ___

On a scale from 1-100,
indicate the score you would most likely expect to receive ___

13. I think that an ability to make personality trait assessments is important.

1	2	3	4	5	6	7
strongly disagree			neither agree or disagree			strongly agree

Rating ___

14. I would like to be able to take a course to improve my snap judgment skills.

1	2	3	4	5	6	7
strongly disagree			neither agree or disagree			strongly agree

Rating ___

15. I think that this program would be better if it provided more information about the target individuals.

1	2	3	4	5	6	7
strongly disagree			neither agree or disagree			strongly agree

Rating ___

16. I think this program is a valid measure of one's abilities to make snap personality trait assessments.

1	2	3	4	5	6	7
strongly disagree			neither agree or disagree			strongly agree

Rating ___

17. I think this task was:

1	2	3	4	5	6	7
very unenjoyable			moderately enjoyable			very enjoyable

Rating ___

Appendix I

RESPONSE QUESTIONNAIRE

When conducting research, especially when using new techniques, it is important that our instructions are clear and we end up studying what we think we are studying. So we need to ask you a few questions to get your impression of the study. Please write in your comments to the questions listed below. You may continue your responses on the back of this sheet if needed.

1. Was there anything other than what I asked you to do that affected your performance and or answers in this study?

2. What do you think that we are studying? Recall the information that you were provided earlier and give any impressions you have of this study.

Appendix J

EXPLANATION OF THE STUDY

This study did not measure your ability to make snap personality trait assessments as you had originally been told. Instead, this research was designed to examine what effect the feedback scores you received would have on your expectancy and satisfaction with task performance. We apologize for deceiving you by telling you that this study concerned trait assessments. However, it was important for us to do so because it reduces to likelihood that subjects would guess what we are trying to study how expectancies affect satisfaction with performance, and that subjects would modify their responses to try to confirm what was believed to be our hypothesis. If you wish to discuss this issue further, please mention this to the experimenter.

In this study the investigators are extending prior research on expectancy effects to examine how different ranges of expectancy affect satisfaction with performance. Several past studies have examined expectancies in terms of a single expressed score that reflects the individual's expectancy of future performance. Researchers who have examined expectancies as a single score have been interested in measuring satisfaction with performance after receiving feedback scores that are close to, or very different from the single expectancy score. In this study, we are examining the effects ranges of expectancies on satisfaction with performance. That is, we are interested in examining how narrow or wide expectancy ranges influence a person's satisfaction with performance on a task. The scores that you received were bogus. The computer program was written to administer a specific false feedback score after each trial. Some subjects received fairly low scores and others received fairly high scores on the performance task. Further, some subjects received scores that were very similar, while others received scores that differed quite a bit from each other. In this way, we can determine how the width of expectancy ranges affect satisfaction with performance.

Please do not discuss the details of this study with other Psy. 2 students. If you have any questions, or would like to find out about the results, contact Dave Enders, 610 Moore, 863-3373, or Dr. M. Mark, 542 Moore, 863-1723.

Signed _____ Date _____